

This Page Is Inserted by IFW Operations  
and is not a part of the Official Record

## **BEST AVAILABLE IMAGES**

Defective images within this document are accurate representations of the original documents submitted by the applicant.

Defects in the images may include (but are not limited to):

- BLACK BORDERS
- TEXT CUT OFF AT TOP, BOTTOM OR SIDES
- FADED TEXT
- ILLEGIBLE TEXT
- SKEWED/SLANTED IMAGES
- COLORED PHOTOS
- BLACK OR VERY BLACK AND WHITE DARK PHOTOS
- GRAY SCALE DOCUMENTS

**IMAGES ARE BEST AVAILABLE COPY.**

**As rescanning documents *will not* correct images,  
please do not report the images to the  
Image Problem Mailbox.**

What is claimed is:

1. An assembly for preparing an intervertebral disc space between a first vertebra and a second vertebra to receive a prosthesis, the assembly comprising:
  - a distractor comprising a first distraction arm and a second distraction arm;
  - a first anchoring device attached to both the first distraction arm and the first vertebra;and
  - a second anchoring device attached to both the second distraction arm and the second vertebra,wherein the first anchoring device moves independently of the second anchoring device.
2. The assembly of claim 1 wherein the movement of the first anchoring device is in a sagittal plane
3. The assembly of claim 2, wherein the movement of the first anchoring device is a pivotal movement.
4. The assembly of claim 1, wherein the movement of the first anchoring device is a linear movement in an anterior-posterior direction.
5. The assembly of claim 1 wherein the first anchoring device comprises a pivot mechanism and the first distracting arm comprises a pin, and further wherein the pivot mechanism engages the pin permitting at least limited rotation of the first anchoring device.
6. The assembly of claim 1 wherein the first anchoring device comprises an elongated shaft and the first distracting arm comprises an elongated recess and further wherein the elongated shaft slidably engages the elongated recess.
7. The assembly of claim 1 further comprising:
  - an alignment guide interposed between the first and second anchoring devices for sagitally aligning the first and second anchoring devices.

8. The assembly of claim 7 wherein the alignment guide comprises a pair of apertures through which a pair of fasteners may pass to fasten to the vertebral bodies.
9. The assembly of claim 7 wherein the first anchoring device comprises a restraint pin deployable into the first vertebral body as one of the fasteners is passed through one of the apertures and fastened to the first vertebral body.
10. The assembly of claim 1 wherein the first anchoring device comprises an adjustable seat for leveling the anchoring devices.
11. The assembly of claim 1 further comprising:  
a measurement instrument attached to the first anchoring device.
12. The assembly of claim 1 further comprising:  
a shaping instrument attached to the first anchoring device.
13. A method of preparing an intervertebral disc space, between first and second vertebral bodies of a vertebral column, to receive an intervertebral prosthesis, the method comprising:  
fixedly attaching first and second anchoring devices to the first and second vertebral bodies, respectively;  
attaching a distraction assembly to the first and second anchoring devices, wherein a first arm of the distraction assembly is attached to the first anchoring device and a second arm of the distraction assembly is attached to the second anchoring device;  
moving the first and second arms of the distraction assembly, in parallel, relative to one another;  
independently moving the first and second anchoring devices relative to the first and second arms, respectively.
14. The method of claim 13 further comprising shaping a first endplate of the first vertebral body independently of shaping a second endplate of a second vertebral body.

15. The method of claim 14 further comprising attaching a shaping instrument to the first distractor arm prior to shaping the first endplate.

16. The method of claim 13 wherein the first anchoring device independently pivots about a rotation pin in the first distractor arm.

17. The method of claim 13 wherein the first anchoring device independently pivots about a connector extending from the first distractor arm.

18. The method of claim 13 wherein the positioning of the first and second anchoring devices is in a sagittal plane.

19. The method of claim 18 wherein the independent movement of the first and second anchoring devices is in the sagittal plane.

20. The method of claim 13 wherein the first and second anchoring devices are fixedly attached to the first and second bodies equidistant from the center of the intervertebral disc space.

21. An assembly for preparing an intervertebral disc space between first and second vertebral bodies to receive a prosthesis, the assembly comprising:

    a distractor, wherein the distractor comprises a first distracting arm in parallel relation to a second distracting arm;

    a first anchoring device coupled between the first distracting arm and the first vertebral body, wherein the first anchoring device comprises a first pivot mechanism and the first distracting arm comprises a first pivot pin and further wherein the first pivot mechanism pivotally engages first pivot pin; and

    a second anchoring device coupled between the second distracting arm and the second vertebral body, wherein the second anchoring device comprises a second pivot mechanism and the second distracting arm comprises a second pivot pin and further wherein the second pivot mechanism pivotally engages second pivot pin.

22. The assembly of claim 21 further comprising an alignment guide extending between the first and second anchoring devices.
23. The assembly of claim 22 further comprising a milling instrument pivotally attached to the instrumentation guide.